

**REMARKS**

The Office Action dated October 20, 2005 has been reviewed carefully and the application has been amended in a sincere effort to place it in condition for allowance.

Claims 1-4, 6-21 are currently pending in the application.

Claims 22-24 have been added to better claim the invention.

Claims 5 and 4-16 were cancelled in a previous amendment.

**Claim Rejections – 35 USC § 112**

Claim 9 was rejected under 35 USC § 112, second paragraph with respect to insufficient antecedent basis for certain limitations in the claims. The claim has been amended to address this rejection.

**Claim Rejections – 35 USC § 103**

Claims 1, 6-8, 11 and 21 were rejected under Claim Rejections – 35 USC § 103(a) as being unpatentable over United States Patent No. 5,586,198 to Lakritz et al., which issued on December 17, 1976 (“Lakritz”), in view of United States Patent No. 5,926,566 to Wang et al., which issued on July 20, 1999 (“Wang”).

Applicant’s invention as set forth in representative claim 1 comprises in part:

A system for input of Chinese characters into a machine, comprising:  
means for input of information, said means for input further comprising means for selecting information from the group consisting of a stroke, a component and a character;  
means for storage of data related to the properties of Chinese characters and compounds, wherein said means for storage comprises data related to component parts of a Chinese character, said data selected from the group consisting of *(1) the identification*

*and order of strokes used to draw said character, said strokes being in accordance with a selected classification scheme, (2) the frequency of occurrence of said character as the first character of a word with respect to an operator's language, (3) the orthographic components of said character in drawing order, and (4) indicators of said character's membership within various subsets of Chinese characters;*

*means for processing of said input information being based upon an order of strokes used to draw said character, for retrieving Chinese character and compounds based upon said stroke sequence, said process means including a plurality of Chinese character encoding processes based on said stored data; and*

*means for display providing indication of correspondence between elements of said means for input and said display; wherein further character selection information is suggested in response to said input.*

Lakritz, on the other hand, relates to a computer-based approach to looking up characters in an ideographic alphabet. A database is searched for characters that match character radicals which are dragged from a palet to a canvas on a screen. The user must drag, delete, translate and resize the radicals to match the specified criteria. The process searches the database for characters that match the specified criteria. Thus, the user must perform several permutations on the dragged items and radicals to build a character while attempting to give the process enough data in order to match the desired character.

In sharp contrast, Applicant's invention does not require this but instead is based upon the order of strokes which would normally be used to draw the character. The Examiner indicates that using the sequence of strokes is well known, however, the patent and passage referenced by the Examiner as cited in the Lakritz patent relates to a system, which is based on the correct writing of the ideograph to be identified.

More specifically, the patent referred to in the Lakritz patent at column 3, beginning at line 27, (United States Patent No. 4,829,583) states that:

One system for identifying characters based on stroke information is the use of the position of the strokes within the Chinese training square: “For example, the position of the first stroke of the character is of great use as a stroke identifying feature. Using the starting point of the initial character stroke of each character, within the Chinese training square permits an indexing of characters having a similar starting point so as to organize the 8000 commonly used individual words into a smaller number of character groups. Since there are only 81 possible starting positions for the individual character the use of the starting point as a character identification feature reduces the library of possible target characters. The specific identification process utilizes several additional select, representative stroke positions as identifying features of the selected character. These stroke positions are used to identify the selected character”. (Col. 4, lines 33-44)

The input device is a data tablet, also known as a digitizer pad, upon which the operator inputs a handwritten Chinese ideograph from which the input signals are generated by the data tablet in response to the operator input, and provides these to a processor.

Thus, this patent describes a device in which the identification process uses “stroke position” not order of strokes. It is not based on stroke sequence, but instead is based upon a touchpad or tablet upon which the user draws a character, and the starting position and other positions identify the selected character. An underlining Chinese training square is used to determine the starting point of the stroke and after narrowing the possibilities, the computer determines characters the user is attempting to draw.

Applicant’s claimed invention does not require this type of input device which must recognize the written character based on stroke position, which is user operator de-

pendent, but instead the identification and order of strokes used to draw said character, as sequentially selected from a keypad by the user.

Thus, the Lakritz patent and the patent cited therein do not render Applicant's invention obvious because of the absence from either patent of the concept of analyzing the stroke sequence entered and the frequency with which a chosen component of a character relates to other previously submitted selections.

The Examiner cites Wang for the proposition that it teaches the frequency of occurrence of characters as the first character of a word with respect to an operator's language. However, the citation in Wang is a simple statement that "For example, if two or more hypotheses have similar confidence levels, they can be re-ordered according to the number of strokes or the frequency of occurrence of the character." (Wang, Col. 23, line 7 – Col. 24, line 2) This statement does not explain how the number of strokes or the frequency would be used and does not even suggest using the order (or sequence) of strokes, and thus does not suggest a system which uses sequence (order) of strokes (and component drawing order), for the purpose of better identifying ideographic characters. Thus, even when combining Lakritz and Wang, the Applicant's invention of using sequence of strokes, with the frequency of occurrence of a character, is not disclosed, taught, or suggested. Accordingly, claim 1, and the claims dependent therefrom, are allowable over the cited references. Applicant respectfully submits that the same reasoning applies to independent claim 11.

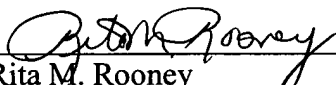
Claims 2, 12-13 and 17-18 were rejected under 35 USC § 103(a) as being unpatentable over Lakritz, in view of Wang, as applied to claim 1, and further in view of Free-

man, United States Patent No. 5,649,223. Applicant respectfully submits that these claims depend on either claims 1 or 11 which are allowable over Lakritz and Wang for the reasons set forth above, even in view of Freeman which simply sets forth a keyboard and touch sensitive screen. All of the rejected claims are dependent upon either claim 1 or 11 which Applicant respectfully submits are allowable over the cited art and therefore it is respectfully submitted that the dependent claims are also in condition for allowance.

Please do not hesitate to contact the undersigned in order to advance the prosecution of this application in any respect.

Please charge any additional fee occasioned by this paper to our Deposit Account No. 03-1237.

Respectfully submitted,

  
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